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REMARKS

The present response is intended to be fully responsive to all points of objection and/or rejection raised by the Examiner and is believed to place the application in condition for allowance. Favorable reconsideration and allowance of the application is respectfully requested.

Applicants assert that the present invention is new, non-obvious and useful. Prompt consideration and allowance of the claims is respectfully requested.

Status of Claims

Claims **1, 3-9, and 11-27** are pending.

Claims **1, 3-9, and 11-27** have been rejected.

Claims **1, 9, and 19** have been amended.

Applicants respectfully assert that the amendments to the claims add no new matter.

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CLAIM REJECTIONS

35 U.S.C. § 103 Rejections

In the Office action, claims **1, 3-9, 11-21, 23-25** and **27** were rejected under 35 U.S.C. § 103(a), as being unpatentable over Gordon et al., in view of Porter et al. (US Patent No. 5,864,682).

Applicants respectfully traverse the rejection of claims **1, 3-9, 11-21, 23-25** and **27**, at least for the reasons given in responses to previous Office Actions pertaining to the standing Patent Application. However, in order to facilitate the examination, the Applicants have amended the independent claims in a way which makes it even more lucidly clear that the claimed invention is novel and patentable over the prior art.

Those Amendments are made in spite of the sincere belief of the Applicants that the claims as previously presented were also patentable, and the Applicants reserve all rights in these claims to file divisional and/or continuation patent applications.

Referring to claim 1, claim 1 was amended to claim a method for providing media streams, the method comprising the steps of:

receiving live media streams at a first path, wherein the first path comprises a video pump coupled to a data acquisition unit;

providing a live media stream from the first path to a client, in response to a request to provide the live media stream to the client;

retrieving media related information that comprises data structures that assist in constructing non-live media streams;

online generating by the video pump, in response to a request to receive a trick play media stream, a non-live media stream, by utilizing the media related information, wherein the generating comprises fetching intra-coded frame from locations that are pointed to at the media related information, and altering timing information of the intra-coded frames and of duplicating frames; and

providing the non-live media stream from a second path to the client, wherein the second path comprises the video pump and a media server being coupled to each other by a network link that differs from a network link of the first path.

It is noted that the amendments find support at least in paragraphs 52 and 60.

The Office argued that the Gordon reference discloses "online generating by the video pump, in response to a request to receive a trick play media stream, a non-live media stream,

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by utilizing the media related information, in response to a request to provide the non-live media stream to a client", and referred to various locations in columns 2, 3, and 4 of that reference.

However, that bit-stream referred to by the Office is disclosed in the passage referred to by the Office (column 3, lines 54-56) as "the second is a stream containing a non-real-time bitstream of encoded video information that is stored by the information server to facilitate VCR-like functions (referred to herein as the storage stream)."

Additionally, all of the trick play streams in the Gordon reference are generated by encoder 200, which receives the video from the video source. Following the generating, the final trick-play streams are stored at information server 108, and are recalled and transmitted as such when requested by a subscriber (see, for example, figure 5).

Referring to the encoding, the Gordon reference clearly states that the encoding is not being made in response to any request, but is done irrespectively of such request when the video is received. See, for example, column 5, lines 13-16: "The broadcast encoder 250 encodes a source video sequence in a conventional manner, i.e., compressing the source video sequence in real-time as the frames are input to the encoder."

That is, the generating of the trick-play media stream in the Gordon reference is carried out by an encoder that is located before a server storage, without any request to receive a media stream (and especially not a request for a media stream that is characterized by at least one trick play characteristic that may define the type of trick play (FF, REW), its speed, and the like, e.g. as discussed in our paragraph 60).

Therefore, clearly the Gordon reference does not teach online generating by the video pump, in response to a request to receive a trick play media stream, a non-live media stream, by utilizing the media related information.

Claim 1 was further amendment to include: "wherein the generating comprises fetching intra-coded frame from locations that are pointed to at the media related information, and altering timing information of the intra-coded frames and of duplicating frames."

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In this same context, it is noted that the claim – even before the amendment included: "retrieving media related information that comprises data structures that assist in constructing non-live media streams"

In relation to the stage of retrieving the media related information, the Office quoted column 4, lines 33-37 which recites "In operation, the video session manager 122 responds to requests from the subscriber equipment 106 for interactive menus and data streams by requesting the server 108 to provide such information, then communicating that information to the requesting subscriber equipment 106."

That is, the sole operation of the video session manager in this context is to communicate to the subscriber equipment information that is received from the server. This information does not comprise any information that assist in constructing non-line media stream – those were shown to be generated much previously, regardless of any request.

Further more, regarding the amendment, clearly the video session manager (that is **not** the entity which the office claimed to do the generating!), does not fetch intra-coded frame from locations that are pointed to at the media related information, and alter timing information of the intra-coded frames and of duplicating frames.

Therefore, clearly the Gordon reference does not teach at least the amendments made to claim 1.

Referring to the Porter reference, it is clear that here to no stream is generated by the video pump – see, for example, column 6, line 66 – column 7, line 11:

"The video pump 130, after receiving the commands and control information from the stream server 110, begins to retrieve digital audio-visual data from the specified location in the specified digital audio-visual file on the mass storage device 140. For the purpose of explanation, it shall be assumed that system 100 delivers audio-visual information in accordance with one or more of the MPEG formats. Consequently, video pump 130 will retrieve the audio-visual data from an MPEG file 104 on the mass storage device 140.

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The video pump 130 transmits the prefix data to the client, and then seamlessly transmits MPEG data retrieved from the mass storage device 140 beginning at the specified location to the client."

That is, the video pump of the Porter reference does not generate any media stream, but merely transmits MPEG data retrieved from the mass storage device.

Therefore, clearly, the Porter reference does not teach online generating by the video pump, in response to a request to receive a trick play media stream, a non-live media stream, by utilizing the media related information.

Also in the Porter reference – no media stream is generated in response to any request. See, for example, column 6, lines 48-52: "In response to the request, the stream server 110 transmits commands to the video pump 130 to cause video pump 130 to transmit the requested digital audio-visual data stream to the client". As aforementioned, in response to that command, the video pump retrieve MPEG information that is already stored in the mass storage.

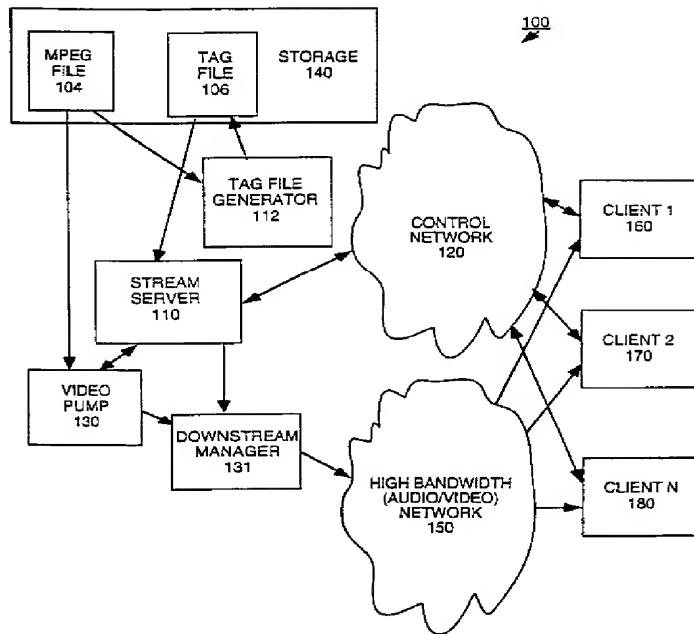
It is noted that the Porter reference also does not teach of generating that comprises fetching intra-coded frame from locations that are pointed to at the media related information, and altering timing information of the intra-coded frames and of duplicating frames.

Therefore, at least the amendments to claim 1 are not taught by Porter, by Gordon, or by any combination of those references.

Referring to the aspects of claim 1 that were not amended, it is noted that the Porter reference does not disclose the stages of "*receiving live media streams at a first path, wherein the first path comprises a video pump coupled to a data acquisition unit; providing a live media stream from the first path to a client;...providing the non-live media stream from a second path to the client, wherein the second path comprises the video pump and a media server being coupled to each other by a network link that differs from a network link of the first path*"- as recited in claim 1.

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As will be illustrated below, the Porter reference include a single path for supplying video and a single path (that includes the stream server 110 – from figure 1B of the Porter reference – provided below) that receives control messages.



The Porter reference describes the **stream server** as responsible for **handling control commands** and especially - upstream control commands. This role of the stream server can be taught from at least the following references: (i) column 5 lines 48-50 describe the stream server as being coupled to a control network; (ii) column 5 lines 55-64 describe requests sent from the users to the stream server through the control network.

The Porter reference describes the **video pump** as responsible for **handling the media streams**. This role of the video pump can be taught from at least the following references: (i) fig. 1B and column 6 lines 2-10 discloses that the video pump (and not the stream server) retrieves the MPEG files from a mass storage; (ii) column 6 lines 15-29 discloses that the clients receive information from the video pump through the high bandwidth (audio/video). Note that the stream server is not connected to the audio/video network but only to the control network.

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Column 6 lines 30-38 of the Porter reference clearly disclose the role of each server: the **video pump** transfer large amounts of data from the mass storage device over the high bandwidth network to the clients and the clients transmit requests to the **stream server** via the **control network**. Lines 46-52 further describe the involvement of the two servers in the process.

Given at least the above references, it is clear that the two paths disclosed by the Porter reference are:

- (i) a first path is a command path, used mainly for upstream requests from the clients (and for downstream non-media responses). This path involves: the command network and the stream server. and
- (ii) a second path is a media path, used for downloading video and audio and involves the video pump and the high bandwidth (audio/video) network.

The Porter reference does not teach two paths for media transmission, a first path for providing live media stream and a second path for providing non-live media stream.

The Porter reference does not teach “providing the non-live media stream from a second path to the client, wherein the second path comprises the video pump and a media server being coupled to each other by a network link that differs from a network link of the first path”. The providing of the non-live media described by the Porter reference involves the storage, the video pump and the high bandwidth network. The stream server is not involved in the media transmission.

As was discussed in the previous Office Action response, the Gordon reference describes a broadcast stream and a non real time stream that are provided by **using only one path**. Both types of streams are provided through a path that includes: an information server 108 and a video session manager 122, coupled to each other through a data path 116. Note that both information server 108 and video manager 122 are always involved in the transmission of the two types of streams and cannot be considered as separate paths.

Thus, nor the Gordon reference neither the Porter reference alone or in combination teach or suggest providing two types of media through two paths, and more specifically – as recited by claims 1 and 19 and similarly by claims 9 and 16: *"providing the non-live media*

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stream from a second path to the client, wherein the second path comprises the video pump and a media server being coupled to each other by a network link that differs from a network link of the first path" and clearly, the media server is not involved in the providing of live media streams: "providing a live media stream from the first path to a client...".

At least for those reasons it is clear that nor the Gordon reference alone neither the Porter reference alone or in combination teach or suggest all the limitations of independent claims 1, 9, 16 and 19, therefore, independent claims 1, 9, 16 and 19 should be allowable. Claims 3-8, 11-15, 17-18, 20-21, 23-25 and 27 depend directly or indirectly from claims 1, 9, 16 and 19 and therefore include all the limitations of these claims. Therefore, Applicants respectfully assert that claims 3-8, 11-15, 17-18, 20-21, 23-25 and 27 are likewise allowable. Accordingly, Applicants respectfully request that the Examiner withdraw the rejections to independent claims 1, 9, 16 and 19 and to claims 3-8, 11-15, 17-18, 20-21, 23-25 and 27 dependent thereon.

Referring to claim 16, that was not amended, it is noted that claim 16 includes: "wherein the media storage and management entity is adapted to generate at least a portion of a non-live media stream in response to a request to provide the non-live media stream to a client." However, as aforementioned, it was shown that the non-live media stream is not generated – not in Gordon nor in Porter – in response to any request, but rather the request is only followed by transmitting data that is retrieved as is from a mass storage device.

Therefore, at least for this reason claim 16 and all the claims depending onto it should be allowed.

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Conclusion

In view of the foregoing amendments and remarks, Applicants assert that the pending claims are allowable. Their favorable reconsideration and allowance is respectfully requested.

Should the Examiner have any question or comment as to the form, content or entry of this Amendment, the Examiner is requested to contact the undersigned at the telephone number below. Similarly, if there are any further issues yet to be resolved to advance the prosecution of this application to issue, the Examiner is requested to telephone the undersigned counsel.

Respectfully submitted,

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